

Amendments to the Claims

Claim 1 (Original): A method for treating AT by administering to an animal a therapeutically effective amount of a chelating agent and a pharmaceutically acceptable carrier.

Claim 2 (Original): The method of claim 1 wherein treatment additionally comprising administering a therapeutically effective amount of an antioxidant.

Claim 3 (Original): The method of claim 1 wherein the chelating agent comprises substances capable of binding any transition metal.

Claim 4 (Original): The method of claim 1 wherein the chelating agent is selected from the group consisting of ferrioxamine, trihydroxamic acid, CP94, EDTA, desferrioxamine hydroxamic acids, deferoxamine B (DFO) as the methanesulfonate salt, also known as desferrioxamine B mesylate (DFOM), desferal from Novartis (previously Ciba-Giegy), apoferritin, CDTA (trans-1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid), and DTPA (diethylenetriamine-N,N,N',N'',N''-penta-acetic acid), and a pharmaceutically acceptable chelating agent of iron thereof.

Claim 5 (Original): The method of claim 1 wherein the chelating agent is capable of crossing cell membranes.

Claim 6 (Original): The method of claim 1 wherein the chelating agent is selected from the group consisting of penicillamine, triene, bathocuproine disulfonate, diethylenetri amine pentaacetic acid, and a pharmaceutically acceptable chelating agent of copper thereof.

Claim 7 (Original): The method of claim 2 wherein the antioxidant is a flavonoid or a derivative thereof.

Claim 8 (Original): The method of claim 7 wherein the flavonoid is selected from the group of quercetin, morin, naringenin and hesperetin, taxifolin, afzelin, quercitrin, myricitrin, genistein, apigenin and biochanin A, flavone, flavopiridol; the soy isoflavonoid, genistein; the tea catechin epigallocatechin gallate; flavonol, epicatechin, hesperetin, chrysin, diosmin, hesperidin, luteolin, and rutin.

Claim 9 (Original): The method of claim 1 wherein the cell or animal is under oxidative stress.

Claim 10 (Original): The method of claim 1 wherein a substance that induces a chelating agent to bind a transition metal is administered.

Claim 11 (Original): A method for treating AT by administering to cells a therapeutically effective amount of a chelating agent and a pharmaceutically acceptable carrier so that genomic stability in said cells is increased compared to cells that were not treated as quantified in viability assays.

Claim 12 (Original): The method of claim 11 wherein treatment additionally comprises administering a therapeutically effective amount of an antioxidant.

Claim 13 (Original): The method of claim 11 wherein the chelating agent comprises substances capable of binding any transition metal.

Claim 14 (Original): The method of claim 11 wherein the chelating agent is selected from the group consisting of ferrioxamine, trihydroxamic acid, CP94, EDTA, desferrioxamine

hydroxamic acids, deferoxamine B (DFO) as the methanesulfonate salt, also known as desferrioxamine B mesylate (DFOM), desferal from Novartis (previously Ciba-Giegy), apoferritin, CDTA (trans-19,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid), and DTPA (diethylenetriamine-N,N,N',N'',N''-penta-acetic acid), and a pharmaceutically acceptable chelating agent of iron thereof.

Claim 15 (Original): The method of claim 11 wherein the chelating agent is capable of crossing cell membranes.

Claim 16 (Original): The method of claim 11 wherein the chelating agent is selected from the group consisting of penicillamine, triene, bathocuproine disulfonate, diethylenetriamine pentaacetic acid, and a pharmaceutically acceptable chelating agent of copper thereof.

Claim 17 (Original): The method of claim 12 wherein the antioxidant is a flavonoid or a derivative thereof.

Claim 18 (Original): The method of claim 17 wherein the flavonoid is selected from the group of quercetin, morin, naringenin and hesperetin, taxifolin, afzelin, quercitrin, myricitrin, genistein, apigenin and biochanin A, flavone, flavopiridol; the soy isoflavonoid, genistein; the tea catechin epigallocatechin gallate; flavonol, epicatechin, hesperetin, chrysin, diosmin, hesperidin, luteolin, and rutin.

Claim 19 (Original): The method of claim 11 wherein the cell or animal is under oxidative stress.

Claim 20 (Original): The method of claim 11 wherein a substance that induces a chelating agent to bind a transition metal is administered.

Claim 21 (Original): A method for treating AT by administering to cells a therapeutically effective amount of a chelating agent and a pharmaceutically acceptable carrier so that oxidative stress in said cells is decreased compared to cells that were not treated as quantified in viability assays.

Claim 22 (Original): The method of claim 21 wherein treatment additionally comprises administering a therapeutically effective amount of an antioxidant.

Claim 23 (Original): The method of claim 21 wherein the chelating agent comprises substances capable of binding any transition metal.

Claim 24 (Original): The method of claim 21 wherein the chelating agent is selected from the group consisting of ferrioxamine, trihydroxamic acid, CP94, EDTA, desferrioxamine hydroxamic acids, deferoxamine B (DFO) as the methanesulfonate salt, also known as desferrioxamine B mesylate (DFOM), desferal from Novartis (previously Ciba-Giegy), apoferritin, CDTA (trans-3,3',2'-diaminocyclohexane-N,N,N',N'-tetraacetic acid), and DTPA (diethylenetriamine-N,N,N',N'',N''-penta-acetic acid), and a pharmaceutically acceptable chelating agent of iron thereof.

Claim 25 (Original): The method of claim 21 wherein the chelating agent is capable of crossing cell membranes.

Claim 26 (Original): The method of claim 21 wherein the chelating agent is selected from the group consisting of penicillamine, triene, bathocuproine disulfonate, diethylenetriamine pentaacetic acid, and a pharmaceutically acceptable chelating agent of copper thereof.

Claim 27 (Original): The method of claim 22 wherein the antioxidant is a flavonoid or a derivative thereof.

Claim 28 (Original): The method of claim 27 wherein the flavonoid is selected from the group of quercetin, morin, naringenin and hesperetin, taxifolin, afzelin, quercitrin, myricitrin, genistein, apigenin and biochanin A, flavone, flavopiridol; the soy isoflavonoid, genistein; the tea catechin epigallocatechin gallate; flavonol, epicatechin, hesperetin, chrysin, diosmin, hesperidin, luteolin, and rutin.

Claim 29 (Original): The method of claim 21 wherein the cell or animal is under oxidative stress.

Claim 30 (Original): The method of claim 21 wherein a substance that induces a chelating agent to bind a transition metal is administered.

Claim 31 (Original): A method for treating AT by administering to an animal a therapeutically effective amount of a chelating agent and a pharmaceutically acceptable carrier and an antioxidant.

Claim 32 (Original): A method for treating AT by administering a therapeutically effective amount of an antioxidant.

Claim 33 (Original): The method of claim 32 wherein the antioxidant is a flavonoid or a derivative thereof.

Claim 34 (Original): The method of claim 33 wherein the flavonoid is selected from the group of quercetin, morin, naringenin and hesperetin, taxifolin, afzelin, quercitrin, myricitrin, genistein,

apigenin and biochanin A, flavone, flavopiridol; the soy isoflavonoid, genistein; the tea catechin epigallocatechin gallate; flavonol, epicatechin, hesperetin, chrysin, diosmin, hesperidin, luteolin, and rutin.

Claim 35 (Original): The method of claim 32 wherein the cell or animal is under oxidative stress.

Claim 36 (Currently amended): A ~~method for providing a~~ pharmaceutical composition for treating AT comprising providing a composition comprising a chelating agent and a pharmaceutically acceptable carrier.

Claim 37 (Currently amended): The pharmaceutical composition~~method~~ of claim 36 wherein the composition additionally comprises a therapeutically effective amount of an antioxidant.

Claim 38 (Currently amended): The pharmaceutical composition~~method~~ of claim 36 wherein the chelating agent comprises substances capable of binding any transition metal.

Claim 39 (Currently amended): The pharmaceutical composition~~method~~ of claim 36 wherein the chelating agent is selected from the group consisting of ferrioxamine, trihydroxamic acid, CP94, EDTA, desferrioxamine hydroxamic acids, deferoxamine B (DFO) as the methanesulfonate salt, also known as desferrioxamine B mesylate (DFOM), desferal from Novartis (previously Ciba-Giegy), apoferritin, CDTA (trans-1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid), and DTPA (diethylenetriamine-N,N,N',N'',N''-penta-acetic acid), and a pharmaceutically acceptable chelating agent of iron thereof.

Claim 40 (Currently amended): The pharmaceutical composition~~method~~ of claim 36 wherein the chelating agent is capable of crossing cell membranes.

Claim 41 (Currently amended): The pharmaceutical composition~~method~~ of claim 36 wherein the chelating agent is selected from the group consisting of penicillamine, triene, bathocuproine disulfonate, diethylenetriamine pentaacetic acid, and a pharmaceutically acceptable chelating agent of copper thereof.

Claim 42 (Currently amended): The pharmaceutical composition~~method~~ of claim 37 wherein the antioxidant is a flavonoid or a derivative thereof.

Claim 43 (Currently amended): The pharmaceutical composition~~method~~ of claim 42 wherein the flavonoid is selected from the group of quercetin, morin, naringenin and hesperetin, taxifolin, afzelin, quercitrin, myricitrin, genistein, apigenin and biochanin A, flavone, flavopiridol; the soy isoflavonoid, genistein; the tea catechin epigallocatechin gallate; flavonol, epicatechin, hesperetin, chrysin, diosmin, hesperidin, luteolin, and rutin.

Claims 44-45 (Canceled).